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TITLE : PRODUCTION OF IMMOBILIZED MICROBIAL CELL

ABSTRACT : PURPOSE: To produce immobilized microbial cells, by adding a specific amount of a specific salt without impairing enzymic activity into a microbial cell slurry of wet viscous microbial cells, reducing the consistency of the above-mentioned slurry and adding immobilizing agents thereto.

CONSTITUTION: A microbial cultivation fluid of viscous microbial cells is centrifuged to prepare a slurry in about 10% microbial concentration. Sulfate, phosphate, chloride or organic acid salt of an alkali metal, alkaline earth metal or ammonium in the form of a solid in an amount of 5-80wt%, preferably 5-60wt% based on the microbial cell slurry is added to the above-mentioned slurry to give a fluid slurry (A). Acrylamide monomer and a polymerization accelerator are uniformly blended with the slurry (A) to prepare a slurry (B). A crosslinking agent and a polymerization initiator are added to the slurry (B) to carry out polymerization. After completing the polymerization, the resultant immobilized polymer is granulated in a granulator to afford the aimed immobilized microbial cells.

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